

AMENDMENT

U.S. Appln. No. 09/555,945

2489-1-001

projection means for projecting ink on each tile in order to print a pattern on the tile, said tile arranged on a conveyor means for conveyance in accordance with a trajectory;

at least one printing head respectively comprising at least two printing modules that are connected to a control unit, each of the printing modules being arranged to project ink on the tile in accordance with a marking width corresponding to a portion of a tile width;

wherein

operation of each printing module is independently controlled by the control unit,

each printing module comprises an independent microprocessor and an independent memory, and

each printing module is an extractable module comprising connecting means for individual connection to the printing head.

2. (Amended) A device according to claim 1, wherein the printing modules are arranged obliquely with respect to the trajectory of the tile in such a way that the marking width of each printing module extends to the marking width of at least one adjacent printing module.

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3. (Amended) A device according to claim 2, wherein the printing modules are arranged in succession.

4. (Amended) A device according to claim 1, wherein the marking widths of the printing modules cover at least the tile width.

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5. (Amended) A device according to claim 1, wherein the microprocessor and the memory comprised in each printing module are connected to the control unit by means of a control circuit arranged in said each printing module.

6. (Amended) A device according to claim 1, wherein said at least one printing head comprises a plurality of serially-arranged printing heads, and wherein the printing modules of the plurality of printing heads are arranged such that the marking widths thereof cover at least the entire tile width.

7. (Amended) A device according to claim 1, comprising at least as many parallelly-arranged printing heads as printing colors are required to print the pattern.

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8. (Amended) A device according to claim 1, wherein the control unit comprises communication means for connecting with other computers and to allow remote management and verification of the device.

9. (Amended) A device according to claim 1, having a printing quality higher than 200 ppp.

Please add the following new claims:

--10. A device according to claim 2, wherein the printing modules are arranged in parallel and with a degree of nonalignment.

11. A printing device for printing on surfaces, the device comprising

projection means for projecting ink on a surface of an flat article in order to print a pattern on said surface, said flat article arranged on a conveyor means for conveying the flat article in accordance with a trajectory;

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at least one printing head respectively comprising at least two printing modules that are connected to a control unit, each of the printing modules being arranged to project ink on the surface in accordance with a marking width corresponding to a portion of a surface width of the flat article;

wherein

operation of each printing module is independently controlled by the control unit,

each printing module comprises an independent microprocessor and an independent memory,

each printing module is an extractable module comprising connecting means for individual connection to the printing head.

12. A printing device according to claim 11, wherein the printing modules are arranged obliquely with respect to the trajectory of the tile in such a way that the marking width of each printing module extends to the marking width of at least one adjacent printing module.

13. A printing device according to claim 12, wherein the printing modules are arranged one after another.

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14. A printing device according to claim 11, wherein the marking widths of the printing modules cover at least the surface width.

15. A printing device according to claim 11, wherein the microprocessor and the memory comprised in each printing module are connected to the control unit by means of a control circuit comprised in the printing module.

16. A printing device according to claim 11, comprising a plurality of series-arranged printing heads, the printing modules comprised in the printing heads being arranged such that the marking widths thereof cover at least the entire surface width.

17. A printing device according to claim 11, comprising at least as many parallelly-arranged printing heads as printing colors are required to print the pattern.

18. A printing device according to claim 11, wherein the control unit comprises communication means for connecting with other computers and to allow remote management and verification of the device.